ELSEVIER

Journal of Materials Processing Technology 104 (2000) 294

Journal of Materials Processing Technology

www.elsevier.com/locate/jmatprotec

Author Index of Volume 104

Ann, N.K., 44

Besshi, T., 21

Calcaterra, S., 74
Campana, G., 74
Carleer, B., 158
Chakrabarti, A.K., 59
Chakrabarty, J., 48
Chan, K.C., 48
Chandel, R.S., 34
Chang, Y.S., 171
Chattopadhyay, A.B., 59
Chen, Y., 150
Chen, Y.-C., 271
Cho, H.-Y., 1, 67
Cho, J.R., 236
Choi, C.-J., 127
Choi, J., 1, 67
Chun, M.S., 11

de Winter, L., 158

Froyen, L., 133

Hartley, P., 25
Hsu, Q.-C., 265
Hung, C., 226
Hung, J.-C., 226
Hwang, S.M., 81

Jeong, H.S., 236
Jeong, Y.H., 145
Jo, C.-Y., 1, 67
Jou, M., 17
Joun, M.S., 207
Jung, D.W., 185
Jung, H.K., 244
Jung, Y.H., 145

Kang, C.G., 244
Kermanidis, Th.B., 94
Kim, H.J., 81
Kim, J.-D., 284
Kim, J.M., 145
Kim, K., 191
Kim, T.H., 81
Krishnamurthy, R., 53
Krishna Kumar, R., 110
Kyrsanidi, An.K., 94

Lee, E.-S., 215
Lee, H.P., 254
Lee, K.H., 254
Lee, S.W., 207
Lee, W.B., 48
Lei, S.-H., 265
Li, H., 34
Lin, Y.C., 171
Liu, W.-Y., 271

Mahdivian, S.M., 150
Malhotra, S.K., 53
Monahan, R., 178
Moon, Y.H., 11
Morimoto, T., 21
Murthy, J.K.N., 59

Nageswara Rao, B., 103
Narayana Murty, S.V.S., 103
Narayanasamy, K., 53
Ng, T.W., 280

Oh, H.-K., 8

Pantelakis, Sp.G., 94
Peng, Y., 284
Pillinger, I., 25

Ravindranath, M.N., 110

Sato, T., 21
Seow, H.P., 34
Shim, H., 191, 200
Son, K., 191
Sreejith, P.S., 53
Suh, E., 200
Sun, J.S., 254

Tomesani, L., 74
Tsay, C.-B., 271
Tsutsui, I., 21

van der Kevie, G., 158
van Veldhuizen, B., 158
van Vugt, L., 133

Wang, J., 178
Wu, S., 34
Wu, X., 34

Xu, Q., 25

Yan, B.H., 171
Yang, F., 178
Yang, K.B., 185
Yeo, S.C., 280
Yongqi, F., 44

Zhang, B., 178
Zhu, Z., 178

Elsevier Science S.A.
PII: S0924-0136(00)00665-8

ELSEVIER

Journal of Materials Processing Technology 104 (2000) 294

Journal of Materials Processing Technology

www.elsevier.com/locate/jmatprotec

Author Index of Volume 104

Ann, N.K., 44

Besshi, T., 21

Calcaterra, S., 74
Campana, G., 74
Carleer, B., 158
Chakrabarti, A.K., 59
Chakrabarty, J., 48
Chan, K.C., 48
Chandel, R.S., 34
Chang, Y.S., 171
Chattopadhyay, A.B., 59
Chen, Y., 150
Chen, Y.-C., 271
Cho, H.-Y., 1, 67
Cho, J.R., 236
Choi, C.-J., 127
Choi, J., 1, 67
Chun, M.S., 11

de Winter, L., 158

Froyen, L., 133

Hartley, P., 25
Hsu, Q.-C., 265
Hung, C., 226
Hung, J.-C., 226
Hwang, S.M., 81

Jeong, H.S., 236
Jeong, Y.H., 145
Jo, C.-Y., 1, 67
Jou, M., 17
Joun, M.S., 207
Jung, D.W., 185
Jung, H.K., 244
Jung, Y.H., 145

Kang, C.G., 244
Kermanidis, Th.B., 94
Kim, H.J., 81
Kim, J.-D., 284
Kim, J.M., 145
Kim, K., 191
Kim, T.H., 81
Krishnamurthy, R., 53
Krishna Kumar, R., 110
Kyrsanidi, An.K., 94

Lee, E.-S., 215
Lee, H.P., 254
Lee, K.H., 254
Lee, S.W., 207
Lee, W.B., 48
Lei, S.-H., 265
Li, H., 34
Lin, Y.C., 171
Liu, W.-Y., 271

Mahdivian, S.M., 150
Malhotra, S.K., 53
Monahan, R., 178
Moon, Y.H., 11
Morimoto, T., 21
Murthy, J.K.N., 59

Nageswara Rao, B., 103
Narayana Murty, S.V.S., 103
Narayanasamy, K., 53
Ng, T.W., 280

Oh, H.-K., 8

Pantelakis, Sp.G., 94
Peng, Y., 284
Pillinger, I., 25

Ravindranath, M.N., 110

Sato, T., 21
Seow, H.P., 34
Shim, H., 191, 200
Son, K., 191
Sreejith, P.S., 53
Suh, E., 200
Sun, J.S., 254

Tomesani, L., 74
Tsay, C.-B., 271
Tsutsui, I., 21

van der Kevie, G., 158
van Veldhuizen, B., 158
van Vugt, L., 133

Wang, J., 178
Wu, S., 34
Wu, X., 34

Xu, Q., 25

Yan, B.H., 171
Yang, F., 178
Yang, K.B., 185
Yeo, S.C., 280
Yongqi, F., 44

Zhang, B., 178
Zhu, Z., 178

Elsevier Science S.A.
PII: S0924-0136(00)00665-8

ELSEVIER

Journal of Materials Processing Technology 104 (2000) 295–298

Journal of
Materials
Processing
Technology

www.elsevier.com/locate/jmatprotec

Subject Index of Volume 104

Adaptive mesh
Melt pool shape and dilution of laser cladding with wire feeding, 284
Adaptive remeshing
Simulation of cold forging using contact and practical adaptive meshing algorithms, 110
Aging
Correlation of heat treatment and corrosion behavior of Zr–Nb–Sn–Fe–Cu alloys, 145
Al–SiC
Gravity and temperature effects on particle distribution in Al–Si/SiC composites, 133
Aluminum sheet
Anti-galling property of a diamond-like carbon coated tool in aluminum sheet forming, 21
Analytical model
An analytical model for the prediction of distortions caused by the laser forming process, 94
Analysis of the effect of material properties on the hydroforming process of tubes, 158
Anti-galling
Anti-galling property of a diamond-like carbon coated tool in aluminum sheet forming, 21
Artificial neural network
Prediction of mechanical properties in spheroidal cast iron by neural networks, 74
Automatic mesh generation
Simulation of cold forging using contact and practical adaptive meshing algorithms, 110
Auxiliary angle
An analysis of the plane-strain bending of an orthotropic sheet in the elastic/plastic range, 48

Bauschinger effect
A note on the inadequacy of dislocation theory (disbonding theory), 8
Broadside edging
Optimization of the amount of edging to increase rolling yields in a plate mill, 11

Carbon/phenolic ablative composites
Evaluation of PCD tool performance during machining of carbon/phenolic ablative composites, 53
Cold forging
Simulation of cold forging using contact and practical adaptive meshing algorithms, 110
Combination process
Machining characteristics of titanium alloy (Ti–6Al–4V) using a combination process of EDM with USM, 171
Composite clad rods
The design and development of a hydrostatic extrusion apparatus, 226
Computer-aided design and analysis
Development and analysis for the large-scale tee-forming process, 265
CONFORM process
Parametric investigation on the surface defect occurrence in CONFORM process by the finite element method, 236
Contact treatment
Contact treatment algorithm for the trimmed NURBS surface, 200
Continuum
Comparative investigation into membrane, shell and continuum elements for the rigid–plastic finite element analysis of two-dimensional sheet metal forming problems, 185
Corrosion
Correlation of heat treatment and corrosion behavior of Zr–Nb–Sn–Fe–Cu alloys, 145
Crop loss
Optimization of the amount of edging to increase rolling yields in a plate mill, 11
Cryogenic
Studies on the grindability of some alloy steels, 59
2D contact
Simulation of cold forging using contact and practical adaptive meshing algorithms, 110
3D microfabrication
Investigation of 3D microfabrication characteristics by focused ion beam technology in silicon, 44

Deep drawing
Optimum blank shape design by sensitivity analysis, 191
Contact treatment algorithm for the trimmed NURBS surface, 200
Diamond grinding
Stock removal rate and workpiece strength in multi-pass grinding of ceramics, 178
Diamond-like carbon coated tool
Anti-galling property of a diamond-like carbon coated tool in aluminum sheet forming, 21
Die failure
Effects of geometry and fillet radius on die stresses in stamping processes, 254
Dilution
Melt pool shape and dilution of laser cladding with wire feeding, 284
Dislocation theory
A note on the inadequacy of dislocation theory (disbonding theory), 8

Elastic–plastic
Elastic–plastic finite element investigation of the effect of the aspect ratio on curvature in the roll–platen forming process, 25
Electro-discharge machining
Analysis of electro-discharge machining process and its comparison with experiments, 150
Machining characteristics of titanium alloy (Ti–6Al–4V) using a combination process of EDM with USM, 171
Erosion wear
Analysis of electro-discharge machining process and its comparison with experiments, 150

Elsevier Science S.A.
PII: S0924-0136(00)00666-X

FEM
Melt pool shape and dilution of laser cladding with wire feeding, 284
FEM simulation
Analysis of the effect of material properties on the hydroforming process of tubes, 158
Finite deformation
Elastic–plastic finite element investigation of the effect of the aspect ratio on curvature in the roll–platen forming process, 25
Finite element analysis
Comparative investigation into membrane, shell and continuum elements for the rigid–plastic finite element analysis of two-dimensional sheet metal forming problems, 185
Parametric investigation on the surface defect occurrence in CONFORM process by the finite element method, 236
Finite element method
A new free surface scheme for analysis of plastic deformation in shape rolling, 81
Effects of geometry and fillet radius on die stresses in stamping processes, 254
Finite element simulation
Elastic–plastic finite element investigation of the effect of the aspect ratio on curvature in the roll–platen forming process, 25
Flow formulation
Simulation of cold forging using contact and practical adaptive meshing algorithms, 110
Flow instability
On the flow localization concepts in the processing maps of titanium alloy Ti–24Al–20Nb, 103
Flow rule
An analysis of the plane-strain bending of an orthotropic sheet in the elastic/plastic range, 48
Focused ion beam technology
Investigation of 3D microfabrication characteristics by focused ion beam technology in silicon, 44
Forging
On the flow localization concepts in the processing maps of titanium alloy Ti–24Al–20Nb, 103
Forming limitation
Parametric investigation on the surface defect occurrence in CONFORM process by the finite element method, 236
Free surface correction
A new free surface scheme for analysis of plastic deformation in shape rolling, 81

Gaussian distribution
Investigation of 3D microfabrication characteristics by focused ion beam technology in silicon, 44
Gear forging
An upper-bound analysis for the forging of spur gears, 67
Glazing
Surface characteristics in the precision grinding of Mn–Zn ferrite with in-process electro-discharge dressing, 215
Globular microstructure
Reheating process of cast and wrought aluminum alloys for thixoforging and their globularization mechanism, 244
Grindability
Studies on the grindability of some alloy steels, 59

High pressure
The design and development of a hydrostatic extrusion apparatus, 226
Holding time
Reheating process of cast and wrought aluminum alloys for thixoforging and their globularization mechanism, 244
Hot deformation characteristics
On the flow localization concepts in the processing maps of titanium alloy Ti–24Al–20Nb, 103
Hydroforming process
Analysis of the effect of material properties on the hydroforming process of tubes, 158
Hydrostatic extrusion apparatus
The design and development of a hydrostatic extrusion apparatus, 226
Hydrostatic extrusion test
The design and development of a hydrostatic extrusion apparatus, 226

IGES format
Contact treatment algorithm for the trimmed NURBS surface, 200
Inconel 718
Induction brazing of Inconel 718 to Inconel X-750 using Ni–Cr–Si–B amorphous foil, 34
Inconel X-750
Induction brazing of Inconel 718 to Inconel X-750 using Ni–Cr–Si–B amorphous foil, 34
Induction coil
Reheating process of cast and wrought aluminum alloys for thixoforging and their globularization mechanism, 244
Induction joining
Induction brazing of Inconel 718 to Inconel X-750 using Ni–Cr–Si–B amorphous foil, 34
In-process electro-discharge dressing (IEDD)
Surface characteristics in the precision grinding of Mn–Zn ferrite with in-process electro-discharge dressing, 215
Intermetallic compounds
Induction brazing of Inconel 718 to Inconel X-750 using Ni–Cr–Si–B amorphous foil, 34
Internal serrations
Forging of spur gears with internal serrations and design of the dies, 1
Involute curve
An upper-bound analysis for the forging of spur gears, 67

Joint clearance
Induction brazing of Inconel 718 to Inconel X-750 using Ni–Cr–Si–B amorphous foil, 34
Joint microstructure
Induction brazing of Inconel 718 to Inconel X-750 using Ni–Cr–Si–B amorphous foil, 34

Kinematically admissible velocity field
An upper-bound analysis for the forging of spur gears, 67

Laser cladding
Melt pool shape and dilution of laser cladding with wire feeding, 284
Laser forming
An analytical model for the prediction of distortions caused by the laser forming process, 94
Linear stability theory
Analysis of the stability of water-jet cutting with linear theory, 17
Longitudinal edging
Optimization of the amount of edging to increase rolling yields in a plate mill, 11

Machine stiffness
Stock removal rate and workpiece strength in multi-pass grinding of ceramics, 178
Marking
Aesthetic laser marking assessment using spectrophotometers, 280

Material removal rate
Analysis of electro-discharge machining process and its comparison with experiments, 150
Machining characteristics of titanium alloy (Ti–6Al–4V) using a combination process of EDM with USM, 171
Mathematical model
Spur gear generation by shaper cutters, 271
Mechanical alloying
Preparation of ultrafine TiC–Ni cermet powders by mechanical alloying, 127
Mechanical properties
Prediction of mechanical properties in spheroidal cast iron by neural networks, 74
Melt pool
Melt pool shape and dilution of laser cladding with wire feeding, 284
Membrane
Comparative investigation into membrane, shell and continuum elements for the rigid–plastic finite element analysis of two-dimensional sheet metal forming problems, 185
Metal bond diamond wheel
Surface characteristics in the precision grinding of Mn–Zn ferrite with in-process electro-discharge dressing, 215
Metal forming
Anti-galling property of a diamond-like carbon coated tool in aluminum sheet forming, 21
Effects of geometry and fillet radius on die stresses in stamping processes, 254
Metal forming process
Simulation of cold forging using contact and practical adaptive meshing algorithms, 110
Metal matrix composites
Gravity and temperature effects on particle distribution in Al–Si/SiC composites, 133
Metalforming
Elastic–plastic finite element investigation of the effect of the aspect ratio on curvature in the roll–platen forming process, 25
Metallic bonding
A note on the inadequacy of dislocation theory (disbonding theory), 8
Metallurgical stability
On the flow localization concepts in the processing maps of titanium alloy Ti–24Al–20Nb, 103
Microalloyed
Studies on the grindability of some alloy steels, 59
Microgravity
Gravity and temperature effects on particle distribution in Al–Si/SiC composites, 133
Mn–Zn ferrite
Surface characteristics in the precision grinding of Mn–Zn ferrite with in-process electro-discharge dressing, 215
Multi-layer
Comparative investigation into membrane, shell and continuum elements for the rigid–plastic finite element analysis of two-dimensional sheet metal forming problems, 185
Multi-stage forging processes
Rigid–viscoplastic finite element analysis of the piercing process in the automatic simulation of multi-stage forging processes, 207

Nd:YAG laser
Aesthetic laser marking assessment using spectrophotometers, 280
Neutral stability
Analysis of the stability of water-jet cutting with linear theory, 17
Neutral surface
An upper-bound analysis for the forging of spur gears, 67

Optimal blank design
Optimum blank shape design by sensitivity analysis, 191
Optimization
Spur gear generation by shaper cutters, 271

Parametric investigation
Parametric investigation on the surface defect occurrence in CONFORM process by the finite element method, 236
Piercing process
Rigid–viscoplastic finite element analysis of the piercing process in the automatic simulation of multi-stage forging processes, 207
Planar anisotropy
An analysis of the plane-strain bending of an orthotropic sheet in the elastic/plastic range, 48
Plane-strain
Comparative investigation into membrane, shell and continuum elements for the rigid–plastic finite element analysis of two-dimensional sheet metal forming problems, 185
Plastic strains
An analytical model for the prediction of distortions caused by the laser forming process, 94
Plasticity
Development and analysis for the large-scale tee-forming process, 265
Plate mill
Optimization of the amount of edging to increase rolling yields in a plate mill, 11
Polycrystalline diamond
Evaluation of PCD tool performance during machining of carbon/phenolic ablative composites, 53
Precipitate
Correlation of heat treatment and corrosion behavior of Zr–Nb–Sn–Fe–Cu alloys, 145
Process parameters
Parametric investigation on the surface defect occurrence in CONFORM process by the finite element method, 236
Protuberance
Spur gear generation by shaper cutters, 271

Recast layer
Machining characteristics of titanium alloy (Ti–6Al–4V) using a combination process of EDM with USM, 171
Reheating condition
Reheating process of cast and wrought aluminum alloys for thixoforging and their globularization mechanism, 244
Rigid–plastic
Comparative investigation into membrane, shell and continuum elements for the rigid–plastic finite element analysis of two-dimensional sheet metal forming problems, 185
Rigid–viscoplastic
Rigid–viscoplastic finite element analysis of the piercing process in the automatic simulation of multi-stage forging processes, 207
Roll–platen forming
Elastic–plastic finite element investigation of the effect of the aspect ratio on curvature in the roll–platen forming process, 25

Sensitivity analysis
Optimum blank shape design by sensitivity analysis, 191
Shape rolling
A new free surface scheme for analysis of plastic deformation in shape rolling, 81
Shaper cutter
Spur gear generation by shaper cutters, 271
Sheet metal forming
An analytical model for the prediction of distortions caused by the laser forming process, 94
Sheet normal scheme
Contact treatment algorithm for the trimmed NURBS surface, 200

Shell
Comparative investigation into membrane, shell and continuum elements for the rigid–plastic finite element analysis of two-dimensional sheet metal forming problems, 185
Silicon nitride ceramics
Stock removal rate and workpiece strength in multi-pass grinding of ceramics, 178
Solid fraction
Reheating process of cast and wrought aluminum alloys for thixoforging and their globularization mechanism, 244
Solidification
Gravity and temperature effects on particle distribution in Al–Si/SiC composites, 133
Spectrophotometer
Aesthetic laser marking assessment using spectrophotometers, 280
Spex-milling technique
Preparation of ultrafine TiC–Ni cermet powders by mechanical alloying, 127
Spheroidal cast iron
Prediction of mechanical properties in spheroidal cast iron by neural networks, 74
Spur gear
Forging of spur gears with internal serrations and design of the dies, 1
An upper-bound analysis for the forging of spur gears, 67
Spur gear generation by shaper cutters, 271
Square spline
Forging of spur gears with internal serrations and design of the dies, 1
SSM
Reheating process of cast and wrought aluminum alloys for thixoforging and their globularization mechanism, 244
Stamping
Effects of geometry and fillet radius on die stresses in stamping processes, 254
Steady-state
A new free surface scheme for analysis of plastic deformation in shape rolling, 81
Stock removal rate
Stock removal rate and workpiece strength in multi-pass grinding of ceramics, 178
Streamline tracing
A new free surface scheme for analysis of plastic deformation in shape rolling, 81
Stretching
Comparative investigation into membrane, shell and continuum elements for the rigid–plastic finite element analysis of two-dimensional sheet metal forming problems, 185
Surface defect occurrence
Parametric investigation on the surface defect occurrence in CONFORM process by the finite element method, 236
Surface finish
Analysis of electro-discharge machining process and its comparison with experiments, 150

Tee-forming
Development and analysis for the large-scale tee-forming process, 265
Tensile test
Rigid–viscoplastic finite element analysis of the piercing process in the automatic simulation of multi-stage forging processes, 207
Tetra-phthalate
Aesthetic laser marking assessment using spectrophotometers, 280
Thixoforging
Reheating process of cast and wrought aluminum alloys for thixoforging and their globularization mechanism, 244
Ti–24Al–20Nb
On the flow localization concepts in the processing maps of titanium alloy Ti–24Al–20Nb, 103
TiC–Ni cermet powders
Preparation of ultrafine TiC–Ni cermet powders by mechanical alloying, 127
Transformation
Studies on the grindability of some alloy steels, 59
Trimmed NURBS surface
Contact treatment algorithm for the trimmed NURBS surface, 200
Trimming loss
Optimization of the amount of edging to increase rolling yields in a plate mill, 11

Ultra-high pressure water-jet
Analysis of the stability of water-jet cutting with linear theory, 17
Ultrasonic machining
Machining characteristics of titanium alloy (Ti–6Al–4V) using a combination process of EDM with USM, 171
Undercut
Spur gear generation by shaper cutters, 271

n value
An analysis of the plane-strain bending of an orthotropic sheet in the elastic/plastic range, 48
R value
An analysis of the plane-strain bending of an orthotropic sheet in the elastic/plastic range, 48

Wavelength
Analysis of the stability of water-jet cutting with linear theory, 17
Width deviation
Optimization of the amount of edging to increase rolling yields in a plate mill, 11
Wire feeding
Melt pool shape and dilution of laser cladding with wire feeding, 284
Workpiece strength
Stock removal rate and workpiece strength in multi-pass grinding of ceramics, 178

Yield function
An analysis of the plane-strain bending of an orthotropic sheet in the elastic/plastic range, 48

Zirconium
Correlation of heat treatment and corrosion behavior of Zr–Nb–Sn–Fe–Cu alloys, 145